

### **REMARKS**

The applicant respectfully request reconsideration in view of the amendment and the following remarks. Support for newly added claim 40 can be found in the original claim 3 and in the examples. The examples show compositions containing a polymer which comprises a carbazole unit and a carbazole compound as a separate compound. The applicant has required that formula (I) is present in the conjugated polymer and formula (II) is present in the at least one bridged carbazole unit. The applicant has corrected the tense that the Examiner objected to in claim 3 in newly added claim 40. In addition, the applicant has added the possibility that structural units of the formula (I) can be incorporated into the conjugated polymer via the bridge R (support can be found in claim 10). Support for newly added claim 41 can be found in the specification at page 17, line 4 through page 18, line 20. No new matter has been added.

Claims 2-4, 8-14, 22-24, and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 2-4, 8, 10-14, 22-24, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts et al ( US2004/0062930) in view of Hu et al (US 6,670,054). Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts in view of Hu as applied to claim 4 and further in view of Maxted et al (WO 03/074628). Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts in view of Treacher et al (WO/02077060) (English equivalent US 2004/0135131). The applicant respectfully traverses these rejections.

### **Rejections under 35 U.S.C. 112**

Claims 2-4, 8-14, 22-24, and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicants regards as the invention. The Examiner questioned definition of R with respect to the phrase “or a combination of these systems” in claims 3, 9 and 10. The applicant has amended the definition of R in independent claim 40 to include “or a combination of these systems”. Support can be found in the original claim 3 at the end of the claim and in the original claims 9 and 10. The applicant believes that the claims as amended are in compliance with 35 U.S.C. 112, second paragraph. For the above reasons, this rejection should be withdrawn.

**Rejections under 35 U.S.C. 103(a)**

Claims 2-4, 8, 10-14, 22-24, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts in view of Hu. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts in view of Hu as applied to claim 4 and further in view of Maxted. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts in view of Treacher.

The applicant's claimed invention requires a mixture requiring

- (A) at least one conjugated polymer comprises one or more carbazole units of the formula (I),
- (B) at least one bridged carbazole unit comprising formula (II) and
- (C) at least one triplet emitter (see independent claims 38 and 40).

It is noted that independent claim 34 requires

- (A) at least one conjugated polymer comprises one or more carbazole units of specific formulas,
- (B) at least one bridged carbazole unit comprising formula (II) and

(C) at least one triplet emitter.

As the Examiner has recognized Roberts does not disclose bicarbazole units with bridging groups which are not two benzene groups (see the middle of page 5 of the Office Action). **Additionally, Roberts does not disclose a separate bridged carbazole unit of the formula (II) as is required by the applicant's claimed invention.**

The Examiner has relied upon Hu to disclose the equivalency of linking groups between carbazoles may be one of several different aryl and hetroaryl groups including phenyl, biphenyl, triphenyl, 9,10-anthacene, stilbenyl, 2,6-naphthylene, thiphen . The applicant does not believe that these are equivalents. The Examiner has not shown why one of ordinary skill in the art would substitute Roberts carbazole with one in Hu.

Furthermore, the applicant does not believe that the other secondary references disclose the following combination

(A) at least one conjugated polymer comprises one or more carbazole units of the formula (I),

(B) at least one bridged carbazole unit comprising formula (II) and

(C) at least one triplet emitter (see independent claims 38 and 40).

A statement that modifications of the prior art to meet the claimed invention would have been "obvious to one of ordinary skill in the art at the time the invention was made" because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). See MPEP § 2143.01 IV. "[R]ejections on obviousness cannot be

sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). Furthermore, the Examiner cannot selectively pick and choose from the disclosed parameters without proper motivation as to a particular selection. The mere fact that a reference may be modified to reflect features of the claimed invention does not make the modification, and hence the claimed invention, obvious unless the prior art suggested the desirability of such modification. *In re Mills*, 916 F.2d 680, 682, 16 USPQ2d 1430 (Fed. Cir. 1990); *In re Fritch*, 23 USPQ2d 1780 (Fed. Cir. 1992). Thus, it is impermissible to simply engage in a hindsight reconstruction of the claimed invention where the reference itself provides no teaching as to why the applicant’s combination would have been obvious. *In re Gorman*, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991).

The applicant has shown in the working examples that compositions containing a polymer which comprises a carbazole unit (A) and a carbazole compound as a separate compound (B) show better results than compositions containing only a polymer which comprises a carbazole unit (compare examples D3 and D5 with D1 as well as examples D4 and D6 with D2) and also better results than compositions only containing a carbazole compound as a separate compound (see comparative examples V1 and V3). For the above reasons, these rejections should be withdrawn.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 14113-00033-US from which the undersigned is authorized to draw.

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Respectfully submitted,

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